

Exhibit A

Marked Up Versions of Amended Paragraphs:

On page 20, please replace the paragraph beginning “E.coli XL1 Blue x pBTaqEc1:...” with the following paragraph:

E.coli XL1 Blue x pBTaqEc1: **TaqEc1** (SEQ ID NO:1) DSM No. 12053

On page 20, please replace the paragraph beginning “E.coli XL1 Blue x pBTaqTne1:...” with the following paragraph:

E.coli XL1 Blue x pBTaqTne1: **TaqTne1** (SEQ ID NO: 3) DSM No. 12050

On page 20, please replace the paragraph beginning “E.coli XL1 Blue x pBTaqTne2:...” with the following paragraph:

E.coli XL1 Blue x pBTaqTne2: **TaqTne2** (SEQ ID NO: 4) DSM No. 12051

On page 20, please replace the paragraph beginning “E.coli XL1 Blue x pBTaqPfu1:...” with the following paragraph:

E.coli XL1 Blue x pBTaqPfu1: **TaqPfu1** (SEQ ID NO: 5) DSM No. 12052

On page 35, please replace the table beginning:

Enzyme	Temperature [°C]					
	25	37	50	60	72	80
TaqPol(BM)	0.0	0.0	5764.4	8489.1	50000.0	57986.1
NHIs-TaqPol	0.0	0.0	5616.1	12165.2	60843.7	74784.4
TaqEc1	704.9	10353.4	50066.5	41034.4	2677.5	1016.2
TaqTne1	0.0	2559.4	15967.0	18900.4	1100.0	0.0
TaqTne2	747.2	5180.2	23549.6	30627.3	64139.1	28727.4



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With the following table:

Enzyme	Temperature [°C]					
	25	37	50	60	72	80
TaqPol(BM)	0.0	0.0	5764.4	8489.1	50000.0	57986.1
NHIs-TaqPol	0.0	0.0	5616.1	12165.2	60843.7	74784.4
TaqEc1 (SEQ ID NO: 1)	704.9	10353.4	50066.5	41034.4	2677.5	1016.2
TaqTne1 (SEQ ID NO: 3)	0.0	2559.4	15967.0	18900.4	1100.0	0.0
TaqTne2 (SEQ ID NO: 4)	747.2	5180.2	23549.6	30627.3	64139.1	28727.4

On page 36, please replace the table beginning:

Enzyme	1 min	3 min	6 min	1 min	3 min	6 min
	80°C	80°C	80°C	95°C	95°C	95°C
TaqPol(BM)	100	100	100	100	100	100
NHIs-TaqPol	100	100	100	100	100	100
TaqEc1	0	0	0	0	0	0
TaqTne1	16	0	0	0	0	0
TaqTne2	100	100	100	92	0	0

With the following table:

Enzyme	1 min	3 min	6 min	1 min	3 min	6 min
	80°C	80°C	80°C	95°C	95°C	95°C
TaqPol(BM)	100	100	100	100	100	100
NHIs-TaqPol	100	100	100	100	100	100
TaqEc1 (SEQ ID NO: 1)	0	0	0	0	0	0
TaqTne1 (SEQ ID NO: 3)	16	0	0	0	0	0
TaqTne2 (SEQ ID NO: 4)	100	100	100	92	0	0

On page 37, please replace the paragraph beginning “**Example 6: 3'-5' exonuclease...**” with the following paragraph:

Example 6: 3'-5' exonuclease test - TaqEc1 (SEQ ID NO: 1) variant

On page 38, please replace the paragraph beginning “**Example 7: Correction of 3'-mismatched primers...**” with the following paragraph:

Example 7: Correction of 3' -mismatched primers and their extension - TaqEc1 (SEQ ID NO: 1) variant (3' -mismatch primer correction assay)